Please substitute the following for pending Claim 1:

[c01] 1.(Amended)A photodetector (100, 200, 300), said photodetector (100, 200, 300), comprising:

a) a substrate (102, 202, 306), said substrate comprising gallium nitride having a dislocation density of less than about 10^3 cm^{-2};

b) at least one active layer (104, 302) disposed on said substrate (102, 202, 306); and

c) at least one conductive contact structure (106, 210, 308) affixed to at least one of said substrate (102, 202, 306) and said at least one active layer (104).

Please substitute the following for pending Claim 5:

[c05] 5.(Amended)The photodetector (100, 200, 300) of Claim 4, wherein said contact comprises said Schottky contact (108, 310) comprising at least one of a metal and a metal oxide selected from the group consisting of palladium, platinum, gold, aluminum, tin, indium, chromium, nickel, titanium, and oxides thereof.

Please substitute the following for pending Claim 10:

[c10] 10.(Amended)The photodetector (200, 300) of Claim 4, wherein said contact comprises said ohmic contact (212, 214, 312) affixed to one of an n-doped active layer (224, 314) and said substrate (202, 306), and wherein said ohmic contact (212, 214, 312) comprises at least one metal selected from the group consisting of aluminum, scandium, titanium, zirconium, tantalum, tungsten, nickel, copper, silver, gold, hafnium, and rare earth metals.

Please substitute the following for pending Claim 62:

[c62] 62.(Amended)The photodetector (100, 200, 300) of Claim 61, wherein said contact comprises said Schottky contact (108, 310) comprising at least one of a metal and a metal oxide selected from the group consisting of palladium, platinum, gold, aluminum, tin, indium, chromium, nickel, titanium, and oxides thereof.

Please substitute the following for pending Claim 67:

[c67] 67.(amended)The photodetector (200, 300) of Claim 61, wherein said contact comprises said ohmic contact (212, 214, 312) affixed to one of an n-doped active layer (224, 314) and said substrate (202, 306), and wherein said ohmic contact (212, 214, 312) comprises at least one metal selected from the group consisting of aluminum, scandium, titanium, zirconium, tantalum, tungsten, nickel, copper, silver, gold, hafnium, and rare earth metals.